

North Lanarkshire Council Report

Environment and Transportation Committee

approval noting

Ref

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Weed Control Review

From Nicole Paterson, Head of Environmental Assets

Email Patersonn@Northlan.gov.uk **Telephone** 01236 632655

Executive Summary

The purpose of this report is to advise committee of the outcome of the weed control review. The review was undertaken following concerns raised around the use of products containing Glyphosate by the Council, and to recommend a way forward to support the need to control weeds and reduce the quantities of Glyphosate products being used in a phased manner.

Recommendations

It is recommended that the committee:

- Note the content of the report.
- Approve the re-introduction of glyphosate treatment for weed control to specified areas of treatment on a risk-based approach.
- Approve a trial of alternative weed control methods such as foam and steam weed control over summer 2021.
- Approve the development of an integrated pest management approach and a 3 year phased appropriate reintroduction and subsequent managed reduction of products containing Glyphosate on a risk based approach, as outlined.

The Plan for North Lanarkshire

Priority Improve North Lanarkshire's resource base

Ambition statement (17) Ensure we keep our environment clean, safe, and attractive

1. Background

- 1.1 Weed control on roads, pavements, in parks, playgrounds and other urban landscapes is currently achieved through a range of techniques which in most UK councils are based on the use of herbicide application, particularly Glyphosate products. However, public and political interest for reducing herbicide for weed control in amenity areas is increasing due to recent concerns about safety of Glyphosate for human health and environmental safety.
- 1.2 At the Council meeting of 04 April 2019 a motion was submitted in the names of Councillor Hogg and Councillor Beveridge. The notice stated “That this council recognises the global health and environmental concerns regarding the use of weed killers containing Glyphosates and requests a report to the Environment and Transportation Committee outlining potential alternative to replace the use of such weed killers”.
- 1.3 The Council recognised the potential risks, and requested that a report was prepared outlining potential alternatives to replace the use of such weed killers, and that an Environmental Impact Report on the current programmes was prepared.
- 1.4 In order to achieve the above, and given the specialist nature of the request a mini competition was attempted through Scotland Excel Framework and then an open procedure, both of which had no returns. From literature found on the subject it was established that a similar exercise was completed by NIAB for another local authority. NIAB EMR who specialise in genetics, genomics and breeding, crop science and production systems and pest and pathogen ecology where then engaged to undertake the review.
- 1.5 At the Council meeting of the 13 of August 2020 a subsequent motion was submitted in the names of Councillor Hogg and Councillor Goldsack. The notice stated “Council agreed (4 April 2019) a Notice of Motion (10) to cease the use of roundup/ Glyphosate for controlling weeds across the Council’s estate due to global health and environmental concerns and growing litigation claims and pay outs relating to the safety of the Glyphosate. An amendment was agreed to request an EIA. This report has just recently been commissioned. Pending the report on alternative methods of weed control. Council affirm its position that Glyphosate will now be banned immediately.
- 1.6 Council noted the risks and the recent commissioning of the assessment and review and immediately banned the use of herbicides containing Glyphosate pending a future report.
- 1.7 Use of Glyphosate was ceased with immediate effect by Council services in August 2020, but lack of a suitable alternative and effective treatment options will undoubtedly increase complaints regarding weed control across North Lanarkshire as we enter the 2021 growing season.

2. Report

Introduction

- 2.1 The scope of procurement undertaken by NIAH EMR included the review of three key areas. These included current weed control processes, alternatives to replace the use

of herbicides and the current position regarding the use of herbicide containing Glyphosate, and these are outlined below. The review of the current weed control process also included an Environmental Impact Assessment of the current processes to undertake weed control using Glyphosate.

Glyphosate-Based Herbicides

- 2.2 Glyphosate-based herbicides are one of the key tools used by many local authorities to control weed growth. Although concerns have been raised regarding Glyphosate safety in relation to human health, its use as a product was approved by the European Union (EU) in 2017 for a further 5 years.
- 2.3 Since the late 1970's the use of Glyphosate-based herbicides has increased approximately 100-fold and was used in over 130 countries. Although a key tool in the control of weeds for local authorities, 90% of Glyphosate use is, and always has been in the agriculture industry.
- 2.4 Reports of Glyphosate toxicity in humans are inconsistent, and although acute effects of Glyphosate are low, there is generally insufficient evidence of the impact of chronic impacts due to lack of studies on realistic exposure levels. Hence the impact of chronic exposure to Glyphosate cannot be ruled out and is a particular concern for operators.

Council's current weed control approach

- 2.5 Prior to the council's decision to ban the use of Glyphosate the majority of weed control on hard surfaces was undertaken using these products. Generally, two applications were undertaken per season. Given that the application requires a period of dry weather, it can be a challenge to achieve this through the growing period.
- 2.6 In addition to herbicide application, mechanical sweeping is also undertaken on a planned basis on the main primary gritting routes at a frequency of twice per annum. This helps remove detritus, which contains weed seeds as well as the substrate needed for weeds to germinate. Sweeping of any other roads and paved areas is undertaken on a reactive basis, and as such this is unlikely to have a significant impact on weed control and growth.

Alternative Weed Control

- 2.7 The review identified a range of alternative weed control methods more recently trialled by local and adopted by some Local Authorities to varying degrees. These include increased mechanical sweeping, traditional hand removal, thermal, hot water, foam, flame and radiant heat applicators, electrical, electromagnetic radiation and the use of alternative herbicides that contain acidic properties.
- 2.8 Although alternative methods are available, any alternative option would require a significant increase in both operatives and mechanical resources. In a 2015 DEFRA study the costs of using an Integrated Pest Management (IPM) or nonherbicide programme increased by a factor of approximately 2-6 and 8-13 respectively when compared to a Glyphosate based herbicide program. The cost only considered the day to day implementation and maintenance (revenue costs) and did not account for any machinery purchases which would be considered a capital investment.

Studies aimed at developing and testing zero and minimal herbicide regimes for controlling weeds on hard surfaces, including the UK, demonstrated that mechanical and thermal control methods require more frequent applications than herbicide to control weeds to similar levels.

- 2.9 At the time of this review (early 2021), the only EU member country that had passed a total ban on the use of Glyphosate was Austria. In the UK there are currently only 80 councils ranging from parish to district and county level that are taking action to stop or significantly reduce their herbicide use across the UK. A small number of UK councils are currently or are planning to be largely Glyphosate free across their districts (e.g. Hammersmith and Fulham), others have committed or have a vision to be pesticide free in the near future such as Brighton and Hove. Others have ceased general Glyphosate use in specific areas such as parks, playgrounds and public gardens whilst others have committed to a more integrated approach. The reluctance for complete cessation of Glyphosate use, is due to the lack of tried and tested alternatives, and ultimately the significant additional costs, and of course the lack of evidence of risk outwith the agriculture industry.

Community Involvement

- 2.10 An alternative approach used by some local authorities involves local communities helping to keep their streets weed and Glyphosate free. One example of this is Lambeth Council who committed in 2019 to halt use of Glyphosate in the borough by October 2021. They launched an interim scheme where residents could request their street be removed from the spraying schedule, if they commit to carry out the street weeding themselves. As part of an IPM approach community involvement could play an important part in the reduction of herbicide.

Environmental impacts

- 2.11 Glyphosate generally has a fast sorption and biodegradation, and short half-life in most soils, including low toxicity to nontarget organisms. When used on hard surfaces there is a risk of run off which can see up to 40% of the applied herbicide being lost to drains, if there is rain within 12 hours of application. The construction of new housing developments and industrial developments with extensive hard surfaces will increase run off into the local environment. In some cases, this could be direct to the aquatic environment, but in most cases any herbicide lost to the road drainage network would be treated at a wastewater treatment plant to controlled levels before release to the aquatic environment.
- 2.12 Although other non-chemical weed control methods are available, they also have environmental impacts. This can include greater carbon emissions because of multiple applications and increased vehicle and plant usage as well as higher energy and water consumption for heat-based treatments such as steam and foam.

PAN (Pesticide Action Network)

- 2.13 Pesticide Action Network is a charity that is focused on promoting alternatives to pesticides in agriculture, urban areas, homes, and gardens and has published a document, in January 2021 entitled “Alternatives to Herbicides – A guide for the Amenity sector”. This guide has information on alternative weed control techniques, case studies etc. and highlights the need for council’s or other organisations that wish to adopt alternatives to pesticide use to follow a four-step plan in this journey, these include:

- An audit of current herbicide practices across all sectors e.g. parks, streets, housing, schools.
 - Initiation of a stakeholder forum involving all key parties.
 - Development of a communications strategy to inform the public of changes to practices and the reasoning behind it.
 - Developing a protocol for trialling non-chemical weed control methods in a variety of locations to determine and demonstrate relative effectiveness.
- 2.14 PAN also suggest a 3-year, phased approach for councils to go herbicide free and many councils seem to be adopting this recommended phased approach to ensure relative effectiveness of the alternatives, and that the increase in resourcing, manpower, machinery and costs are understood.

The Future

- 2.15 Given the concerns surrounding the use of Glyphosate-based herbicide products for weed control local authorities are taking steps to reduce the quantities being used. Therefore, the future of weed control should be based on weed prevention to enable long-term, fewer herbicide applications, and laborious weed control and surface repairs. Consideration should also be given if repeated treatments and areas of significant weed growth would be more effectively treated by resurfacing in their entirety. This would have an impact on our capital programmes which are predominately focused on asset condition as a means of prioritising on a risk based approach to replacement work.
- 2.16 Where alternative measures are adopted, they may not be as effective as conventional herbicide application therefore there will be a greater need to begin educating our communities on acceptance of weed levels and a shift in perceived acceptability and cleanliness of the public realm. Despite the risks that weeds pose to pedestrians and surface condition, they are wild plants which are simply growing in a place perceived to be undesirable.

Conclusion – The North Lanarkshire Way

- 2.17 It is clear from the review that an IPM approach to amenity weed control will give the best results for long term weed management from surface construction to season application of a mixture of approaches. IPM comes with additional financial and environmental costs, with monitoring, accurate record keeping, and timely action at the core of its success. Some of the key recommendations of the review are.
- Design amenity areas to reduce weeds through pavement selection, competitive planting, and mulches.
 - Determine weed tolerance levels for each area and monitor using weed guide levels.
 - Link weed levels to available budget
 - Consider the environmental impact of treatment options.
 - Identify no chemical spray areas as per the priorities identified ie. Parks, play areas.
 - Consider resurfacing as an alternative for troublesome areas.
 - Adopt a range of measures including more proactive treatments such as sweeping.
 - Educate our communities on altered weed control approaches, the risks and benefits to facilitate a greater tolerance of weeds under the new approach.

- 2.18 To reinforce the conclusion, Committee are asked to approve the re-introduction of Glyphosate in the areas of least risk to human health such as pavements, cemeteries and road channels outwith public parks and play areas, under a risk-based approach. This is to enable the continued effective control of weeds in low risk areas to human health whilst trials of alternative methods of control are undertaken over the summer of 2021.
- 2.19 To ensure the Council can achieve a future reduction in the use of Glyphosate from the requested reintroduction for the 2021 season, it is proposed that a phased 3 year plan is developed through to 2024, and a trial of alternative weed control methods, as outlined in the report, is undertaken over the summer period of 2021.
- 2.19 The effectiveness of the required investment (manpower and machinery) and costs of each method will be determined. A future report will be submitted to this committee in 2021 cycle 4, outlining the options available and detailing the resources required for each approach to determine the appropriate three year approach to reduce the use of Glyphosate within an overall programme of weed control.
- 2.20 If the Committee are not minded to approve the reintroduction of Glyphosate on a risk based approach for the 2021 treatments, as described, it should be noted that the Council have no other proven, effective or budgeted effective weed treatment. The significant impact of weed growth will detract further from the environment within and outwith our communities, as we follow the roadmap out of lockdown.

3. Equality and Diversity

- 3.1 **Fairer Scotland Duty**
The Fairer Scotland Duty does not apply.
- 3.2 **Equality Impact Assessment**
Not required.

4. Implications

- 4.1 **Financial Impact**
- Short term costs relating to trials of alternative treatment methods would be met from existing budgets. Future alternative delivery models, including potential increased costs and resources would be reported to committee in cycle 4 of 2021.
- 4.2 **HR/Policy/Legislative Impact**
- None
- 4.3 **Environmental Impact**
- No apparent Environmental risk if deployed on a risk based approach with appropriate training, risk assessments and safe systems of work together with PPE for operators.
- 4.4 **Risk Impact**

Whilst there has been litigation brought in America regarding the use of Glyphosate many local authorities continue to use the product for weed control. Given that the product is licenced for use and the recommendation is a phased reduction in line with other local authorities, any risks are considered to be low and will be managed.

5. Measures of success

- 5.1 Reduction in the quantity of Glyphosate-based weed control products being used each year, targeted to areas of least risk and highest impact.

6. Supporting documents

- 6.1 Full report available from the service upon request.



Nicole Paterson
Head of Environmental Assets